




# Great Smoky Mountains National Park

## FungiMap Species Guide, 2003

Produced in cooperation with the Asheville Mushroom Club, Duke University, Discover Life in America, and Great Smoky Mountains National Park.

<p><b>Not shaped like mushrooms or shelves on wood</b></p>	<p>Not parasol- or shelf-shape. Odd mix of puff-balls, stink horns, false morels, and other strange shapes.</p>
<p>Fruiting body a <b>spore-bearing sac ringed by triangular rays</b> which are leathery or woody; mouth may form a beak, ejects puff of spores if touched; Some species have a second, less-developed ring inside the outer rays.</p> <p><b>Earthstars—<i>Geastrum sp.</i></b></p>	 <p>© Br. Alfred Brousseau, Saint Mary's College</p>
<p>Fruiting body <b>black or dark brown cups</b> ½” to 2.5” across, often turning out along the rim, tough, leathery, sometimes hairy; Stalks up to 2.5” long, often hidden in ground, moss, or leaf litter.</p> <p><b>Devil’s Urn—<i>Urnula craterium</i></b></p>	 <p>George Barron, University of Guelph, Canada</p>
<p>Fruiting body small cup, less than 1” tall or wide, containing <b>egg-like spore cases</b>, Told from other Bird’s Nest Fungi by the <b>sides being ridged or streaked</b>.</p> <p><b>Streaked Bird’s Nest Fungus—<i>Cyathus striatus</i></b></p>	 <p>George Barron, University of Guelph, Canada</p>

### References:

- Barron, George. 1999. Mushrooms of Northeast North America. Lone Pine Publishing.
- Bessette, Alan E., Arleen R. Bessette, and David Fischer. 1997. Mushrooms of Northeastern North America. Syracuse University Press.
- Hesler, L.R. 1960. Mushrooms of the Great Smokies. University of Tennessee Press.

We wish to thank George Barron, John Walker, and the other photographers credited for allowing the use of their photos for this guide.

Fruiting body is **hard and black**, finely pitted, inside is white, up to 6" tall, in a **variety of finger-like shapes**;  
Grows on dead wood.

**Deadman's Fingers—*Xylaria polymorpha***



David Dennis, NA Mycological Association, [www.namyco.org](http://www.namyco.org)

Fruiting body **black, flattened club**, sometimes shiny, up to 5" tall, slight widening near end;  
Several species of different genera, can only be told apart by microscopic examination of spores.

**Black Viscid Earth Tongue—*Gloeglossum difforme* and similar species**



George Barron, University of Guelph, Canada

Fruiting body **yellow to orange-yellow club** up to 2.5" tall including stalk, **head round, flattened** and wider than stalk;  
Stalk slightly scaly.

**Orange Earth Tongue—*Microglossum rufum***



George Barron, University of Guelph, Canada

Fruiting body **bright orange or yellow, club-shaped**, 1-2" tall;  
Stalk whitish;  
Grows out of buried moth or caterpillar pupae.

**Orange-colored Cordyceps—*Cordyceps militaris***





Surface is roughened like sandpaper;  
Cap reddish-brown to blackish;  
Stalk olive-colored to yellowish, 2-3.5" tall;  
Growing out of buried relative of the truffle.

**Round-headed Cordyceps—**  
*Cordyceps capitata*



George Barron, University of Guelph, Canada

Fruiting body with **saddle-shaped** cap, whitish to yellow or tan, and 0.3 to 1.5" tall;  
Stalk is ridged, of the same color as the cap and 0.5 to 2.5" tall;  
Usually fruits in fall or late summer.

**Saddle-backed False Morel—***Helvella crispa*



George Barron, University of Guelph, Canada

Fruiting body reddish brown to dark brown **brain-like but without ridges and pits** as in a true morel, 2-5" tall;  
Stalk whitish, broad at base, 3.5-6" tall;  
Usually fruits in spring.

**Carolina False Morel—***Gyromitra caroliniana*







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Fruiting body erect and **phallus-like** with **head usually covered in olive-gray, foul-smelling slime**;  
Stalk 2-4 inches long, pale-yellowish to white and spongy;  
Grows on ground or wood chips.

**Ravenel's Stinkhorn—***Phallus ravenelii*



P. Super, NPS

<p>Fruiting body a <b>yellowish round ball with a mouth outlined in red</b>, no collar at the base; Stalk up to 2” long, spongy but <b>not cased in jelly</b>.</p> <p><b>Ravenel’s Stalked Puffball—</b> <i>Calostoma ravenelii</i></p>	 <p>P. Super, NPS</p>
<p>Similar to Ravenel’s Stalked Puffball, but with <b>broken collar around base of head</b> and jelly around the stalk or cap.</p> <p><b>Yellow Stalked Puffball—</b><i>Calostoma lutescens</i></p>	<p>picture not available</p>
<p>Fruiting body a <b>red, round ball with a mouth outlined in deeper red</b>; <b>Grows in a dense jelly</b>, like tomatoes in aspic; Stalk 1-3” long, spongy and covered in jelly.</p> <p><b>Tomato and Aspic—</b><i>Calostoma cinnabarina</i></p>	 <p>David Dennis, NA Mycological Association, <a href="http://www.namyco.org">www.namyco.org</a></p>
<p>Fruiting body round, tapering to a wide stalk, off-white with the <b>top covered in short, spiny bumps</b> (“jewels”); When mature, becomes brownish; top opens into a mouth which puffs out spores when touched.</p> <p><b>Devil’s Snuff-box—</b><i>Lycoperdon perlatum</i></p>	 <p>Dr. Robert Thomas &amp; Margaret Orr © Calif. Acad. of Sciences</p>
<p>Fruiting body 2-5” across, partially buried, olive to black, <b>disintegrating into brown spores</b>, shows <b>network of spore chambers</b> when cut if fresh, no mouth; Tapers to a stalk-like base; Can stain paper or clothing if touched.</p> <p><b>Dye-maker’s False Puffball, —</b> <i>Pisolithus tinctorius</i></p>	 <p>George Barron, University of Guelph, Canada</p>